



September 28, 2007

Sent via email

Eric Johnson  
U.S. Environmental Protection Agency  
Region 8, 8ENF-T  
999 18<sup>th</sup> Street, Suite 300  
Denver, Colorado 80202-2466

RE: Progress report for August 2007 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Mr. Johnson:

Per paragraph 64 of the Order, enclosed is a copy of the August 2007 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at [pglader@hecla-mining.com](mailto:pglader@hecla-mining.com).

Sincerely,

A handwritten signature in black ink, appearing to read "P. Glader", written over a horizontal line.

Paul L. Glader  
Manager Environmental Services

Encl

Cc: HMC Legal Dept (w/o attachments)  
John Jacus, Esq. (DG&S)



September 28, 2007

Sent via U.S. Mail

Glenn Rogers, Chairman.  
Shivwits Band of Paiute Indian Tribe  
P.O. Box 448  
Santa Clara, Utah 84765

John Krause  
Bureau of Indian Affairs Phoenix Area Office  
U.S. Department of Interior  
P.O. Box 10  
Phoenix, AZ 85001

Kelly Youngbear  
BIA Southern Paiute Agency  
P.O. Box 720  
St. George, UT 84771

RE: Progress report for August 2007 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Chairman Rogers, Mr. Krause and Ms. Youngbear:

Per paragraph 64 of the Order, enclosed is a copy of the August 2007 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at [pglader@hecla-mining.com](mailto:pglader@hecla-mining.com).

Sincerely,

A handwritten signature in black ink, appearing to read "P. Glader", written over a horizontal line.

Paul L. Glader  
Manager Environmental Services

Encl

Cc: HMC Legal Dept. (w/o attachments)  
John Jacus, Esq. (DG&S) (w/o attachments)  
Eric Johnson (USEPA, Region VIII) (w/o attachments)



September 28, 2007

**MEMORANDUM TO:** Apex File  
**COPIES TO:** distribution  
**FROM:** Paul Glader  
**SUBJECT:** **Progress Report No. 40 for period ending August 31, 2007;  
Pond 2 Final Closure - Apex Site, Washington County, Utah**

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### **Summary**

The 19th visual inspection, per the long term monitoring plan, was conducted on August 11. No unusual conditions were noted.

The settlement monuments were surveyed September 26 by Alpha Engineering Company, no appreciable settlement was noted.

### **Discussion**

1. Surface Monitor Results To Date – Since monitoring of the top surface began (Jan 4, 2006), there has been no appreciable movement in the surface monuments at the Apex site.

### **Work Planned for Next Period**

1. Visual inspection of site.
2. Settlement monument survey – quarterly basis.

### **Sampling and Analysis in Period**

#### *Field Tests, Inspections & QA/QC*

1. The 19th post closure site inspection was done on August 11; a copy of the inspection report is included in the Supplemental Attachments section.
2. The monuments were surveyed on September 26.

### **Cost and Schedule**

Committed costs in August 2007 were \$275. Total project to date committed is approximately \$1,245,000. The cost report for August is attached.

Current status of the deliverables listed in the RCRA 7003 order includes:

| <b>Deliverable</b>                            | <b>Reference Paragraph</b> | <b>Due</b>                                                | <b>Remarks</b>                                                                                                         |
|-----------------------------------------------|----------------------------|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| Post warning signage around perimeter of site | 57                         | <b>15 days after effective date of order</b>              | Work completed on March 9, 2004                                                                                        |
| Begin implementation of closure plan          | 63                         | <b>45 days after receipt of filing of order</b>           | Work started on February 23, 2004                                                                                      |
| Monthly progress reports                      | 64                         | <b>28<sup>th</sup> day after close of month</b>           | Requirement in effect after order is filed.                                                                            |
| Completion report                             | 66                         | <b>30 days after completion of all closure plan tasks</b> | Construction completion report submitted on 3/13/2006. A follow-up report to be issued after end of monitoring period. |

The update of the schedule milestones includes:

| <b>Milestone</b>                          | <b>Target</b>      | <b>Actual</b>   | <b>Remarks</b>                                                                    |
|-------------------------------------------|--------------------|-----------------|-----------------------------------------------------------------------------------|
| Issue bid package – Phase I (Sump Drains) | 6/14/04            | <b>6/15/04</b>  | Portion of RFP materials issued at pre-bid on 6/14/04; remainder sent via courier |
| Issue RFP package – Phase III             | 6/24/04            | <b>6/24/04</b>  |                                                                                   |
| Award contract for Phase I                | 6/24/04            | <b>6/29/04</b>  | Date contract was shipped to Hughes                                               |
| Pre-bid meeting – Phase III               | 7/19/04            | <b>7/19/04</b>  |                                                                                   |
| Start Phase I (Sump Drains) construction  | 7/12/04            | <b>7/19/04</b>  |                                                                                   |
| Start Phase II (Evaporation)              | 7/19/04            | <b>7/29/04</b>  |                                                                                   |
| Receive bids for Phase III                | 8/2/04             | <b>8/2/04</b>   |                                                                                   |
| Re-bid Phase III contract package         | April 2005         | <b>4/27/05</b>  | Date bid package was sent to Hughes                                               |
| Start Phase III construction              | End of August 2005 | <b>8/29/05</b>  | Start of contractor mobilization                                                  |
| Complete Phase III construction           | Dec 23rd 2005      | <b>12/23/05</b> | Completion of contract scope of work                                              |
| Issue Construction Completion Report      | Week of 3/13/2006  | <b>3/13/06</b>  |                                                                                   |

### **Supplemental Attachments**

1. August 11, 2007 long term inspection report, by D. Truman.
2. August Cost Report
3. Monument monitoring – September 26, 2007 report attached, by Alpha Engineering Company.

# Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecia Mining Company - Long-Term Maintenance and Monitoring Plan

## Form 1 of 4 - Summary

| Date: <u>8-11-07</u>                                        |                              |                                                                                                                  |                                                                                                                                                                                                                  |
|-------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inspector: <u>TRUMER</u>                                    |                              |                                                                                                                  |                                                                                                                                                                                                                  |
| Cover System Component                                      | Potential Problem            |                                                                                                                  | Limits Potentially Exceeded                                                                                                                                                                                      |
| Site Perimeter                                              | Erosion or Fencing Issues    |                                                                                                                  | NA                                                                                                                                                                                                               |
| Cover System<br>(outslopes, top, rock)                      | Subsidence                   |                                                                                                                  | Minor: ponding < 1" some gullyying / erosion Yes <input checked="" type="checkbox"/> No <input type="checkbox"/><br>Significant: see Table 2 Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                                             | Embankment Slope Stability   |                                                                                                                  | excessive movement or surface cracks > than 1" Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                                                               |
|                                                             | Gullyying                    | on top                                                                                                           | depth > 1" Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                                                                                                   |
|                                                             |                              | at embankment crest or on outslope                                                                               | depth > 2" Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                                                                                                   |
|                                                             |                              | w/in normal flow channel in diversion channel                                                                    | no gullyying allowed Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                                                                                         |
|                                                             |                              | w/in diversions at toe of impoundment outslope                                                                   | no gullyying allowed Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                                                                                         |
|                                                             |                              | in diversion channel at any other location                                                                       | NA NA                                                                                                                                                                                                            |
|                                                             | Erosion Protection Stability |                                                                                                                  | rock subsiding or missing Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                                                                                    |
|                                                             | Seepage                      |                                                                                                                  | no colored seepage allowed (red, blue, yellow w/ crystallization) Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                                                                            |
|                                                             | Runoff Control System        | Diversion Channel                                                                                                | rock in place, channel not moving, fence stable Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>                                                                                              |
| Diversion Swales                                            |                              | rock in place, no silting in or head cutting Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> |                                                                                                                                                                                                                  |
| Excessive silt build up at fence lines in diversion channel |                              | allowed if not effecting cover system Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>        |                                                                                                                                                                                                                  |

\* Mark all areas of concern or requiring repairs on attached site map.

**Annual Site Inspection - Apex Site - Pond 2**

**Hecla Mining Company - Long-Term Maintenance and Monitoring Plan**

**Form 2 of 4 - Site Perimeter**

|                                                                                         |                                                                                      |
|-----------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| Inspection Date: <u>8-11-07</u>                                                         |                                                                                      |
| Inspector: <u>Truman</u>                                                                |                                                                                      |
| <b>Visible Outlying Areas</b>                                                           |                                                                                      |
| Observed Condition:                                                                     | <u>Had some minor flooding around the 25 of the north water Run around the pond.</u> |
| Observed Damage:                                                                        | <u>minor gullying.</u>                                                               |
| May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |                                                                                      |
| <b>Property Boundary Fence and Gate (walk fence line)</b>                               |                                                                                      |
| Observed Condition:                                                                     | <u>Looks good.</u>                                                                   |
| Observed Damage:                                                                        | <u>None.</u>                                                                         |
| Potential Corrective Actions:                                                           | <u>None.</u>                                                                         |
| May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |                                                                                      |
| <b>All Upgradient Areas (areas that drain onto property)</b>                            |                                                                                      |
| Observed Condition:                                                                     | <u>Looks fine</u>                                                                    |
| Observed Damage:                                                                        |                                                                                      |
| May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |                                                                                      |

\* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

**Form 3 of 4 - Impoundment**

|                                           |                                                                                                         |  |                                                                                         |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------------|
| Inspection Date: <u>8-11-87</u>           |                                                                                                         |  |                                                                                         |
| <b>Outslopes</b>                          |                                                                                                         |  |                                                                                         |
| Observed Performance:                     | Rock Cover Subsidence:      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>         |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Excessive Slope Movement (failure): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Gully Development:      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>             |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Observable Leachate (colored): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>      |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Excessive Siltation (at slope toe): Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Observed Damage: <u>None</u>              |                                                                                                         |  |                                                                                         |
| Potential Corrective Actions: <u>None</u> |                                                                                                         |  |                                                                                         |
| <b>Top (top surface soils)</b>            |                                                                                                         |  |                                                                                         |
| Observed Performance:                     | Cracking (>1" width):      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>          |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Settlement / Evidence of Ponding: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>   |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Erosion / Gullyng:      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>             |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Observed Damage: <u>minor gullyng</u>     |                                                                                                         |  |                                                                                         |
| Potential Corrective Actions: <u>None</u> |                                                                                                         |  |                                                                                         |
| <b>Erosion Protection Layer (rock)</b>    |                                                                                                         |  |                                                                                         |
| Observed Performance:                     | Rock Staying in Place:      Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>         |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Rock Subsiding:      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Missing Rock:      Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>                  |  | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Observed Damage: <u>None</u>              |                                                                                                         |  |                                                                                         |
| Potential Corrective Actions: <u>None</u> |                                                                                                         |  |                                                                                         |

\* Mark all areas of concern or requiring repairs on attached site map.

### Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

### Form 4 of 4 - Diversion Channel and Swales

|                                           |                               |                                                                     |                                                                                         |
|-------------------------------------------|-------------------------------|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Date: <u>8-11-07</u>                      |                               |                                                                     |                                                                                         |
| Inspector: <u>JRM</u>                     |                               |                                                                     |                                                                                         |
| <b>Diversion Channel</b>                  |                               |                                                                     |                                                                                         |
| Observed Performance:                     | Erosion Protection in place:  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Normal Flow Channel in place: | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Encroaching on Site Fencing:  | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Observed Damage: <u>NONE</u>              |                               |                                                                     |                                                                                         |
| Potential Corrective Actions: <u>NONE</u> |                               |                                                                     |                                                                                         |
| <b>Diversion Swales</b>                   |                               |                                                                     |                                                                                         |
| Observed Performance:                     | Erosion Protection in place:  | Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Flow Channel Silting In:      | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
|                                           | Head Cutting:                 | Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> | May require repair: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> |
| Observed Damage: <u>NONE</u>              |                               |                                                                     |                                                                                         |
| Potential Corrective Actions: <u>NONE</u> |                               |                                                                     |                                                                                         |

\* Mark all areas of concern or requiring repairs on attached site map.



| Activity                                              | 2004 Budget    | Revised Budget<br>May 2004 | Committed Cost<br>this Period | Cumulative<br>Committed Cost<br>To Date 8-31-07 | Forecasted Cost<br>To Complete | Forecasted Final<br>Cost | Remarks on Forecast to Complete                    |
|-------------------------------------------------------|----------------|----------------------------|-------------------------------|-------------------------------------------------|--------------------------------|--------------------------|----------------------------------------------------|
| <b>Phases I through III (Completed February 2006)</b> |                |                            |                               |                                                 |                                |                          |                                                    |
| Phase I - Drain Excess Liquid From Tailings           | 189,200        | 72,700                     |                               | 67,928                                          | 0                              | 67,928                   |                                                    |
| Phases II, IIA + IIB - Evaporate Excess Liquid        | 6,000          | 8,000                      |                               | 242,882                                         | 0                              | 242,882                  |                                                    |
| Phase III - Regrading & Final Cover System            | 337,000        | 342,050                    |                               | 504,742                                         | 0                              | 504,742                  |                                                    |
| Field Indirect Costs                                  | 164,500        | 213,568                    |                               | 378,517                                         | 0                              | 378,517                  | Includes Jan + Feb 2006 long term monitoring costs |
| Hecla Costs                                           | 18,700         | 18,700                     | 0                             | 33,324                                          | 0                              | 33,324                   |                                                    |
| <b>Subtotal Phases I through III</b>                  | <b>715,400</b> | <b>655,018</b>             | <b>0</b>                      | <b>1,227,393</b>                                | <b>0</b>                       | <b>1,227,393</b>         |                                                    |
| <b>Long Term Monitoring (through FY 2010)</b>         |                |                            |                               |                                                 |                                |                          |                                                    |
| Site Inspections                                      |                |                            | 275                           | 3,563                                           | 1,122                          | 4,685                    |                                                    |
| Settlement Monitoring                                 |                |                            | 0                             | 4,050                                           | 6,075                          | 10,125                   |                                                    |
| Consultant Support:                                   |                |                            |                               |                                                 |                                |                          |                                                    |
| Annual Geotechnical Engineer Inspections              |                |                            | 0                             | 2,495                                           | 18,100                         | 20,595                   | Includes settlement monitoring data analysis       |
| Vegetation Monitoring                                 |                |                            | 0                             | 0                                               | 20,000                         | 20,000                   | Allowance for surveys in FY 2007, 2009 and 2010    |
| Site Conditions Review - MEI                          |                |                            | 0                             | 3,161                                           |                                |                          |                                                    |
| Site Conditions Review - SVL Analytical               |                |                            | 0                             | 2,079                                           |                                |                          |                                                    |
| <b>Maintenance:</b>                                   |                |                            |                               |                                                 |                                |                          |                                                    |
| Erosion Repair Allowance                              |                |                            | 0                             | 0                                               | 7,500                          | 7,500                    |                                                    |
| Overseeding Allowance                                 |                |                            | 0                             | 0                                               | 9,820                          | 9,820                    |                                                    |
| <b>Hecla Project Management Costs:</b>                |                |                            |                               |                                                 |                                |                          |                                                    |
| Labor                                                 |                |                            | 0                             | 2,266                                           | 7,909                          | 10,175                   |                                                    |
| Travel expenses                                       |                |                            | 0                             | 0                                               | 1,312                          | 1,312                    |                                                    |
| <b>Subtotal Long Term Monitoring</b>                  | <b>0</b>       | <b>0</b>                   | <b>275</b>                    | <b>17,614</b>                                   | <b>71,938</b>                  | <b>84,312</b>            |                                                    |
| <b>Total Pond 2 Final Closure</b>                     | <b>715,400</b> | <b>655,018</b>             | <b>275</b>                    | <b>1,245,007</b>                                | <b>71,938</b>                  | <b>1,311,705</b>         |                                                    |



# ALPHA ENGINEERING COMPANY


148 East Tabernacle, St. George, UT 84770 • (435) 628-6500 • Fax: (435) 628-6553

## HECLA MINING SITE MONUMENT MONITORING (AS-BUILD DATE: SEPTEMBER 26, 2007)

| Monument # | Northing | Easting  | Elevation | Remarks       |
|------------|----------|----------|-----------|---------------|
| #1         | 10121.35 | 10130.72 | 3685.61   | Top alum. cap |
| #2         | 10146.01 | 10277.47 | 3685.73   | Top alum. cap |
| #3         | 10092.31 | 10417.33 | 3686.03   | Top alum. cap |
| #4         | 9966.65  | 10489.50 | 3685.71   | Top alum. cap |
| #5         | 9865.67  | 10437.08 | 3686.44   | Top alum. cap |
| #6         | 9807.81  | 10293.13 | 3686.29   | Top alum. cap |
| #7         | 10013.31 | 10283.62 | 3686.99   | Top alum. cap |
| #8         | 9989.92  | 10130.34 | 3685.74   | Top alum. cap |
| #9         | 9862.83  | 10149.33 | 3685.63   | Top alum. cap |
| #10        | 10006.02 | 9997.80  | 3678.00   | Top alum. cap |
| #11        | 9964.22  | 10309.03 | 3684.59   | Top alum. cap |



Donna  
Jackson/P2/R8/USEPA/US  
10/01/2007 08:00 AM

To Eric Johnson/ENF/R8/USEPA/US@EPA, Amy  
Swanson/ENF/R8/USEPA/US@EPA  
cc Rebecca Perrin/P2/R8/USEPA/US@EPA  
bcc  
Subject Re: Fw: Apex - Report for August 2007 

Hi Eric & Amy,

Rebecca Perrin is now the project officer for the Paiute Tribes. Please forward all information to her.  
Thanks.

Donna Jackson  
Tribal Program Manager  
U.S. Environmental Protection Agency  
Region 8  
1595 Wynkoop Street  
Denver, CO 80202-1129  
Phone: 303-312-6281  
Fax: 303-312-6064

Eric Johnson/ENF/R8/USEPA/US

Eric  
Johnson/ENF/R8/USEPA/US  
10/01/2007 07:10 AM

To Amy Swanson/ENF/R8/USEPA/US@EPA, Donna  
Jackson/P2/R8/USEPA/US@EPA  
cc  
Subject Fw: Apex - Report for August 2007

----- Forwarded by Eric Johnson/ENF/R8/USEPA/US on 10/01/2007 07:09 AM -----



"Paul Glader"  
<pglader@hecla-mining.com>  
09/28/2007 05:58 PM

To Eric Johnson/ENF/R8/USEPA/US@EPA  
cc  
Subject Apex - Report for August 2007



Apex Pond.2 - progress rpt 40 complete, august 2007.pdf